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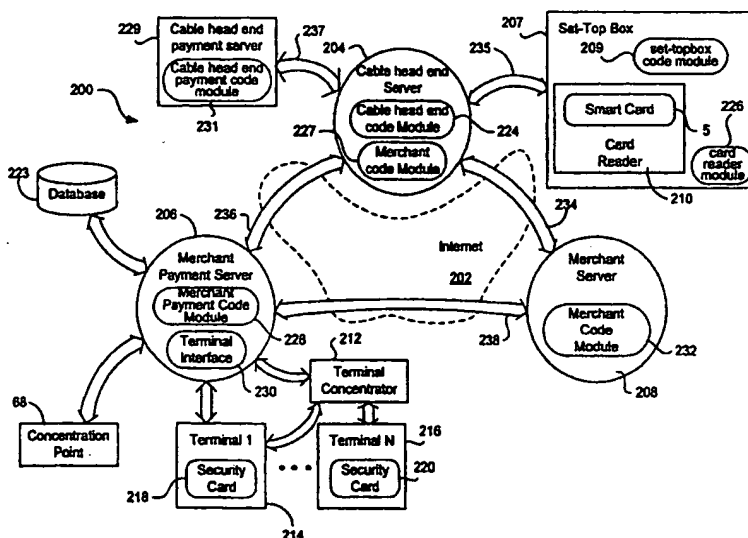
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- Published:  
— with international search report  
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

[Continued on next page]

(54) Title: CABLE TELEVISION PAYMENT AND LOAD SYSTEM USING SMART CARD



(57) Abstract: An architecture and system loads and uses a smart card for payment of goods and/or services purchased on-line over the Internet or directly from a cable provider. A set-top box module on a set-top box controls the interaction with a consumer and interfaces to a card reader which accepts a smart card. Debiting works in conjunction with a merchant server and a merchant payment server. In addition, debiting works in conjunction with a cable head end server and a cable head end payment server. Loading works in conjunction with a bank server and a load server. Alternatively, loading functions in conjunction with a load server when value is loaded from a pre-funded account. To load value, the cable head end server requests a load from a user account at the bank server or a pre-funded account at the load server.

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*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 01/07615

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 H04N7/173 G07F19/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H04N G07F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 98 43427 A (CANAL+) 1 October 1998 (1998-10-01) page 2, line 18 - line 23 page 9, line 17 - line 19 page 20, line 14 - line 20	1,11,16, 17
A	WO 00 04717 A (THOMSON) 27 January 2000 (2000-01-27) page 3, line 37 -page 4, line 2 page 5, line 34 - line 36 page 7, line 5 - line 9 page 7, line 34 -page 8, line 11 page 9, line 2 - line 3	1,11,16, 17
P,A	WO 01 09851 A (VISA) 8 February 2001 (2001-02-08) abstract	1,11,16, 17

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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

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"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

11 December 2001

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## INTERNATIONAL SEARCH REPORT

International Application No

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, A	WO 01 08113 A (VISA) 1 February 2001 (2001-02-01) abstract ---	1, 11, 16, 17
X	US 5 790 677 A (FOX ET AL) 4 August 1998 (1998-08-04)	19, 26
Y	column 6, line 30 - line 35	20, 21
A	column 7, line 59 - line 67 column 19, line 38 - line 43 column 28, line 57 - line 65; figure 23 column 29, line 7 - column 10; figure 23 column 29, line 36 - line 67; figure 23 ---	30, 39
Y	US 5 883 810 A (FRANKLIN ET AL) 16 March 1999 (1999-03-16)	20, 21
A	column 1, line 19 - line 25  column 3, line 48 - column 4, line 5 ---	19, 26, 30, 39
A	US 5 392 353 A (MORALES) 21 February 1995 (1995-02-21) abstract ---	19, 26, 30, 39
A	WO 98 49658 A (VISA) 5 November 1998 (1998-11-05) abstract -----	19, 26, 30, 39

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US 01/07615

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

**FURTHER INFORMATION CONTINUED FROM PCT/SA/ 210**

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

**1. Claims: 1-18**

**Smart card loading system**

**2. Claims: 19-48**

**Smart card payment system**

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 01/07615

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			WO 0109851 A1 08-02-2001

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Information on patent family members

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